

# **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

## **Annual Report on AB 2588 Air Toxics “Hot Spots” Program**

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## **INTRODUCTION**

This report satisfies Section 44363 of the California Health and Safety Code which requires the South Coast Air Quality Management District (AQMD) to annually prepare and publish a status and forecast report of the Air Toxics “Hot Spots” Information and Assessment Act (or AB 2588) activities. The main body of the report presents AB 2588 activities that occurred in calendar year 2009 and describes plans for future activities [Section 44363(a)(1)]. Appendix A lists facilities which have prepared health risk assessments for the AB 2588 program and their corresponding risks [Section 44363(a) (2) and (3)]. Appendix B describes the status of control measures and rules to reduce emissions of toxic air contaminants [Section 44363(a)(4)].

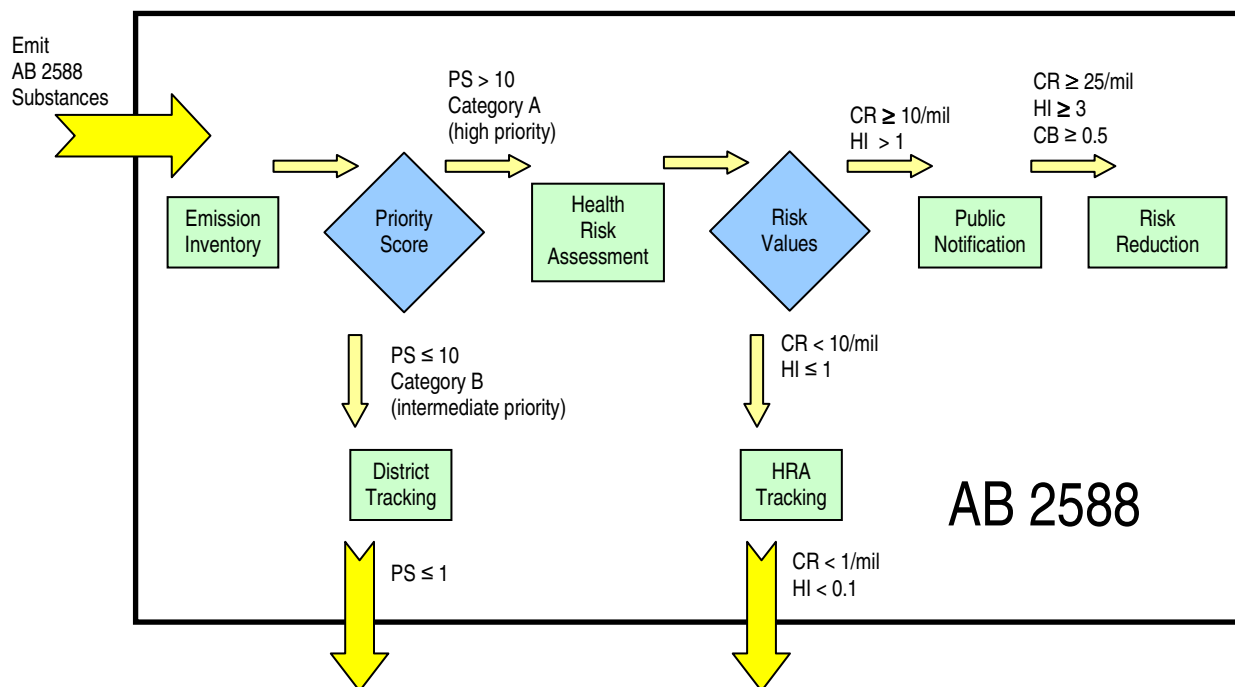
### **Background**

In 1987, the California legislature adopted the Air Toxics “Hot Spots” Information and Assessment Act (or AB 2588). AB 2588 requires facilities to submit an air toxics inventory report (ATIR). A facility’s priority score is calculated from information in the ATIR.

AQMD staff follows the procedures in Health and Safety Code Section 44360 for prioritization and categorization of facilities. The potency, toxicity and amount of toxics released into the air, as well as the distance to workers, residents and sensitive receptors (such as hospitals, schools, and day care centers) are considered for prioritization and categorization. Facilities are assigned to high, medium, and low priority categories.

A facility with a priority score greater than ten (10) must provide a health risk assessment (HRA), following guidelines established by the State of California Office of Environmental Health Hazard Assessment (OEHHA),<sup>[1]</sup> and supplemented by AQMD guidelines.<sup>[2]</sup> If the risk reported in the HRA exceeds specific thresholds, then the facility is required to provide public notice to the affected community. The public notice process is discussed in more detail later in this document. The program is illustrated in Figure 1.

In 1992, the California legislature added a risk reduction component, the Facility Air Toxic Contaminant Risk Audit and Reduction Plan (or SB 1731), which required the District to specify a significant risk level, above which risk reduction would be required. In Rule 1402 – Control of Toxic Air contaminants From Existing Sources, the Governing Board set the significant risk level at a cancer risk of 100 in a million, and a total chronic or acute hazard index of 5.0. The Board also established action risk levels at a cancer burden of 0.5, a cancer risk of 25 in a million, and a hazard index of 3.0. One-time public notification and a public meeting are required for facilities with cancer risks greater than or equal to ten in a million or non-cancer acute or chronic hazard index greater than one. Rule 1402 requires annual public notice until the facility gets below the action risk levels.



**Figure 1 - Schematic of the Hot Spots Program**

(CR = cancer risk; PS = priority score; HI = hazard index; CB = cancer burden)

Currently, AQMD staff uses the web-based Annual Emissions Reporting (AER) Program to obtain a preliminary toxic inventory used for facility prioritization. Facilities with priority scores greater than ten are then asked to submit a detailed ATIR and perform an HRA using CARB's Hotspots Analysis and Reporting Program (HARP).<sup>[3]</sup>

### Universe

AQMD has nearly 600 facilities active in the program, more than any other air district in the state. A facility is considered active in the AB 2588 program if it is subject to Hot Spots fees and is required to update its toxic inventory once every four years. This includes facilities that have:

- cancer risks greater than or equal to one in a million; or
- non-cancer hazard index greater than or equal to 0.1; or
- priority score greater than 1.

Air districts were also permitted to identify Industry-wide categories. The facilities that qualify for these categories share the same Standard Industrial Classification (SIC) code, for the most part are small businesses that would suffer severe economic hardships by individual compliance, and can be easily and generically characterized. To date, the AQMD has identified seven Industry-wide categories:

- Retail Gasoline Dispensing;
- Perchloroethylene Dry Cleaning;
- Auto Body Shops;
- Fiberglass Molding;
- Printing;
- Metal Plating; and
- Wood Stripping / Refinishing.

The advantage to an Industry-wide category is that compliance may be handled collectively. The California Air Pollution Control Officers Association's (CAPCOA) Toxics Committee has been tasked with developing statewide emission inventory and risk assessment guidelines for several of these Industry-wide categories. Specifically, such guidelines have been completed for auto body shops<sup>[4]</sup> and gasoline service stations.<sup>[5]</sup> The guidelines for perchloroethylene dry cleaners<sup>[6]</sup> are being finalized by CAPCOA. The guidelines provide a cost-effective and uniform method for calculating facility emissions and estimating toxic risks for the approximately 1,600 auto body shops, 3,200 gasoline service stations, and 1,000 perchloroethylene dry cleaners under the AQMD's jurisdiction. In this manner, the AQMD may prepare Industry-wide inventories, risk assessments, and public notices and risk reduction plans if necessary. Facilities with emergency diesel internal combustion engines (DICEs) only are treated similarly to an Industry-wide category.

## **ACTIVITIES AND ACCOMPLISHMENTS**

In calendar year 2009, the AB 2588 program staff accomplished the following:

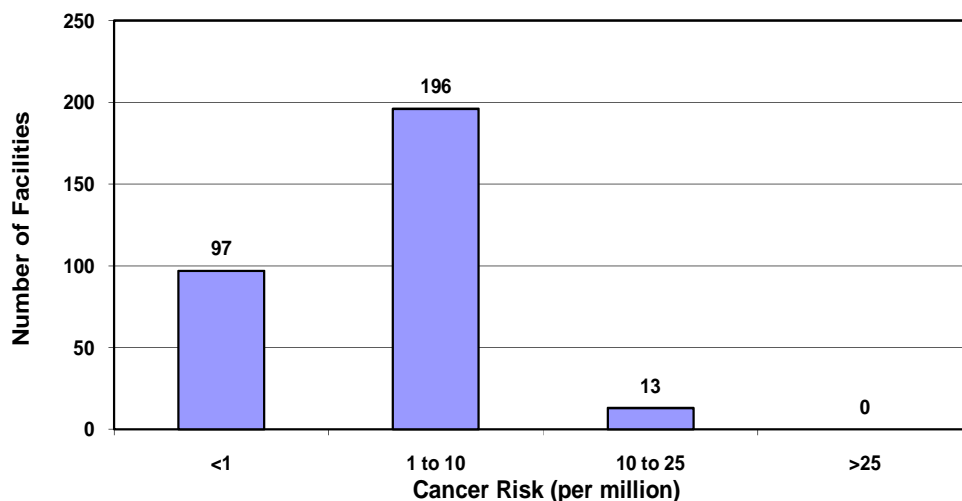
- Reviewed twelve (12) facility HRAs;
- Conducted one (1) public notice meeting;
- Prioritized three hundred thirty (330) AB 2588 facilities for FY2006-07, requested seven (7) detailed ATIRs, and evaluated five (5) ATIRs;
- Notified nine (9) facilities to prepare HRAs;
- Approved one (1) Risk Reduction Plan (RRP); and
- Added criteria and toxic emissions for fiscal year 2006-2007 to the AB 2588 website and made it available to the public.
- Reviewed the 2005 Toxics Release Inventory (TRI) and National-Scale Air Toxics Assessment (NATA) data.

Each of these efforts is further explained below.

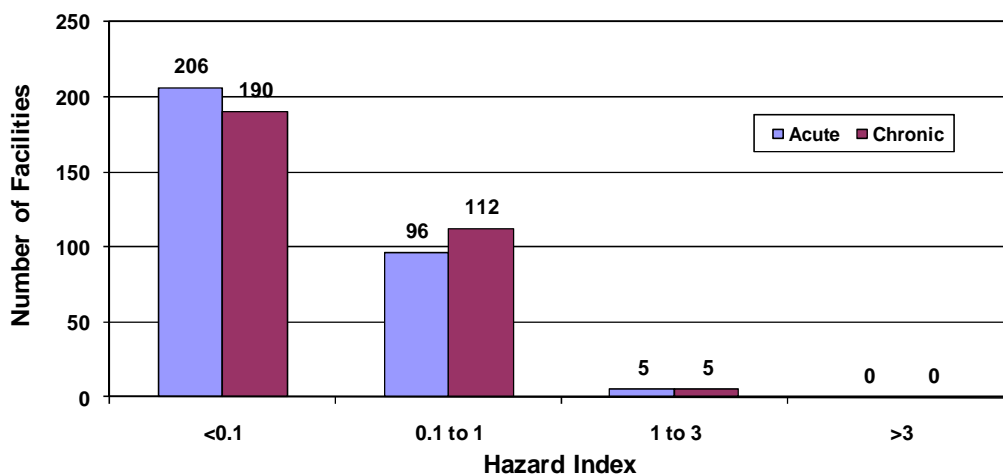
### **ATIRs, HRAs, and Risk Reduction**

To date, staff has reviewed and approved over 300 facility HRAs, 43 facilities were required to perform a public notice, and 21 facilities were subject to risk reduction.

These 21 facilities are shown in Table 1, page 6. The results of the approved facility HRAs are summarized in Figures 2 and 3. For some of the facilities, the values indicate the risks after the implementation of risk reduction plans. Appendix A summarizes the cancer and non-cancer risk levels for each of the facilities that prepared an HRA. Over 96 percent of the facilities now have cancer risks below ten in a million and over 98 percent of the facilities have acute and chronic non-cancer hazard indices less than 1.



**Figure 2 - Summary of Facility Cancer Risks**



**Figure 3 - Summary of Facility Non-Cancer Risks**

In 2009, 12 HRAs were reviewed. Among these HRAs, 7 were approved, and one is pending review by the Office of Environmental Health Hazard Assessment (OEHHA). In 2009, 13 additional facility HRAs were submitted.

Since the amendment of Rule 1402 on March 17, 2000, which lowered the action risk levels, the AB 2588 staff identified 21 facilities that were required to reduce risks (see Table 1).

**Table 1 - Status of Risk Reduction Plans**

<b>Fac. ID</b>	<b>Facility Name</b>	<b>Submitted?</b>	<b>Approved?</b>	<b>Implemented?</b>	<b>Residual Risk</b>
7427	Owens-Brockway Glass	Yes	Yes	Yes	Acute HI: 0.01
7730	E.R. Carpenter	Yes	Yes	Yes	Chronic HI: 1.34
8015	Anadite Inc.	Yes	Yes	Yes	Cancer: 3.5
8547	Quemetco	Yes	Yes	Yes	Cancer: 4.4 Acute HI: 0.086 Chronic HI: 0.74 Can. Burden 0.023
8570	Embee Inc.	Yes	Yes	Yes	Cancer: 6.6
14191	Nicklor Chemical Co.	Yes	Yes	Yes	Non-cancer HIs: 0 (a)
15504	Schlosser Forge Co.	Yes	Yes	Yes	Cancer : 9.5 Chronic HI: 1.11
18294	Northrop-Grumman	Yes	Yes	Yes	Cancer: 7.6
22410	Palace Plating	Yes	Yes	Yes	Cancer: 5.6 Acute HI: 0.73 Chronic HI: 0.38
25012	Amada Manufacturing America, Inc.	Yes	Yes	Yes	Cancer: <0.1
41229	Lubeco, Inc.	Yes	Yes	Yes	Cancer: 14.0
45938	E.M.E. Inc.	Yes	Yes	Yes	Cancer: <0.1
48323	Sigma Plating Co.	Yes	Yes	Yes	Cancer: 13.8
61160	GE Engine Services	Yes	Yes	Yes	Acute HI: 0.7
116459	GE Engine Services	Yes	Yes	Yes	Cancer: 9.3
119127	PRC DeSoto International	Yes	Yes	Yes	Cancer: 0 (a)
126501	Vought Aircraft Industries, Inc.	Yes	Yes	Yes	Cancer: 19.7 (b)
134931	Alcoa Global Fasteners, Inc.	Yes	Yes	Yes	Cancer: 0.6
800037	DeMenno/Kerdoon	Yes	Yes	Yes	Cancer: 4.9 Acute HI: <0.01 Chronic HI: 0.02 Can. Burden 0.01
800063	Grover Products Co.	Yes	Yes	Yes	Cancer: 3.3
800196	American Airlines, Inc.	Yes	Yes	Yes	Cancer: 5.4 Acute HI: 0.86

(a) Facility left the South Coast Air Basin. Thus, risks are zero.

(b) The specific risk driver listed in this HRA is no longer in use & the resulting risk has been eliminated.

## Public Notification Process

Under the Air Toxics “Hot Spots” Information and Assessment Act, the operator of a facility must provide notice to all exposed persons if, in the judgment of the AQMD, the facility’s health risks assessment indicates there is a significant health risk associated with air toxic emissions from the facility. The goal of public notification is to inform the public of their exposure to toxic substances routinely released to the air from facilities and to identify the potential health risks associated with those exposures. It also provides the AQMD and facilities with the opportunity to communicate historical, present or planned future activities aimed at reducing the public’s exposure to air toxics. California H&SC Sections 44361, et al., (AB 2588) requires facilities that exceed certain risk thresholds to provide public notice. The AQMD Board adopted Public Notification Guidelines in October 1992 for core facilities <sup>[7]</sup>, which established the following public notice significance thresholds:

- Maximum Individual Cancer risk  $\geq 10$  in one million, or
- Non-Cancer Acute hazard index (HI)  $> 1$ , or
- Non-Cancer Chronic HI  $> 1$ .

The notice is made in accordance with procedures specified by the AQMD, which are as follows:

***Identify the impact area, that is, the area above the notification thresholds:*** For cancer risk, the area of impact is the geographic area encompassed by the ten in one million Maximum Individual Cancer Risk (MICR) isopleths. For non-cancer health risk, the area of impact is the geographic area encompassed by the 1.0 total hazard index isopleths.

***Distribute public notice materials to all addresses and to parents of children attending school in the area of impact:*** The AQMD has prepared public notice materials which are provided to the facility operators and must be used to provide public notice. The facility operator must distribute the public notice materials in the area of the impact within 30 days of receipt of the AQMD letter informing them of their obligation to perform public notification, and provide AQMD with verification that the distribution was completed.

***Conduct a public meeting:*** A public meeting must be held as part of the public notification process. The facility operator will be requested to hold the meeting. It is important that facility operators work closely with the AQMD concerning their plans for the public meeting, including time, date, location and content. Meetings will be attended by AQMD staff.

Public meetings should be scheduled for a date that is within two to four weeks of the distribution of the notice materials. The notice letter will include information about the time, date, location and purpose of the public meeting.

The meeting should be held on a weekday evening or weekend and at a location that is convenient for community members. The facility may wish to hold the meeting at their facility site if they have an available room with a capacity of at least 50 people. The AQMD's Public Advisor's Office maintains a list of facilities (schools, community centers, etc.) which may be available for public meetings.

Facility operators are encouraged to work closely with the AQMD regarding the meeting agenda. The recommended agenda includes a presentation followed by a question and answer period. A pre-meeting should be arranged between the AQMD and facility staff to finalize meeting plans, including the appropriate persons to attend and assist in the presentation. It is recommended that the following topics be included in the presentation:

- Purpose of the meeting;
- Overview of the AB 2588 program;
- Description of the facility: type of operation, processes involved, and materials used or produced at the facility;
- Overview of health risks from air toxics;
- Description of the health risk assessment process;
- Description of facility emissions and results of the HRA;
- Facility's projects or plans to reduce toxic emissions or risk; and
- Government programs to reduce risks from air toxics.

The pre-arranged meeting agenda may not meet the needs of the public in all cases. The facility operator should be prepared to modify the meeting agenda in response to the reasonable needs of the attendees.

***Distribute copies of the facility's approved HRA to the public library closest to the facility and all school libraries in the area of impact:*** Prior to distribution of the notice materials, the facility must deliver a copy of their approved HRA, with a cover letter provided by the AQMD, to all school libraries and the public library closest to the facility and provide verification of the delivery to the AQMD.

A public notification meeting for Vista Metals Corp. was held on February 25, 2009 because the facility's cancer risks were over 10 in a million. Vista Metals Corp. is a secondary aluminum smelting facility located in Fontana since 1978. The toxic chemicals contributing to the cancer risks were dibenzofurans, dioxins, and diesel particulate matter emitting from dryers and reverberatory furnaces and portable welding equipment. About 105 households or businesses were notified and 2 members of the public and 2 staff members from the local county development office attended the meeting. At the time of question and answer, all the questions were pertaining to another facility called "Fontana Speedway" and none related to Vista Metals Corp. risk assessment. AQMD compliance staff tried to answer all the questions in addition to follow-up calls and visits with the concerned citizens to address all their concerns.



## **Public Outreach and Response to Community Concerns**

Over the past few years, AB 2588 staff has been extensively involved in the investigation of community concerns regarding Quemetco Company.

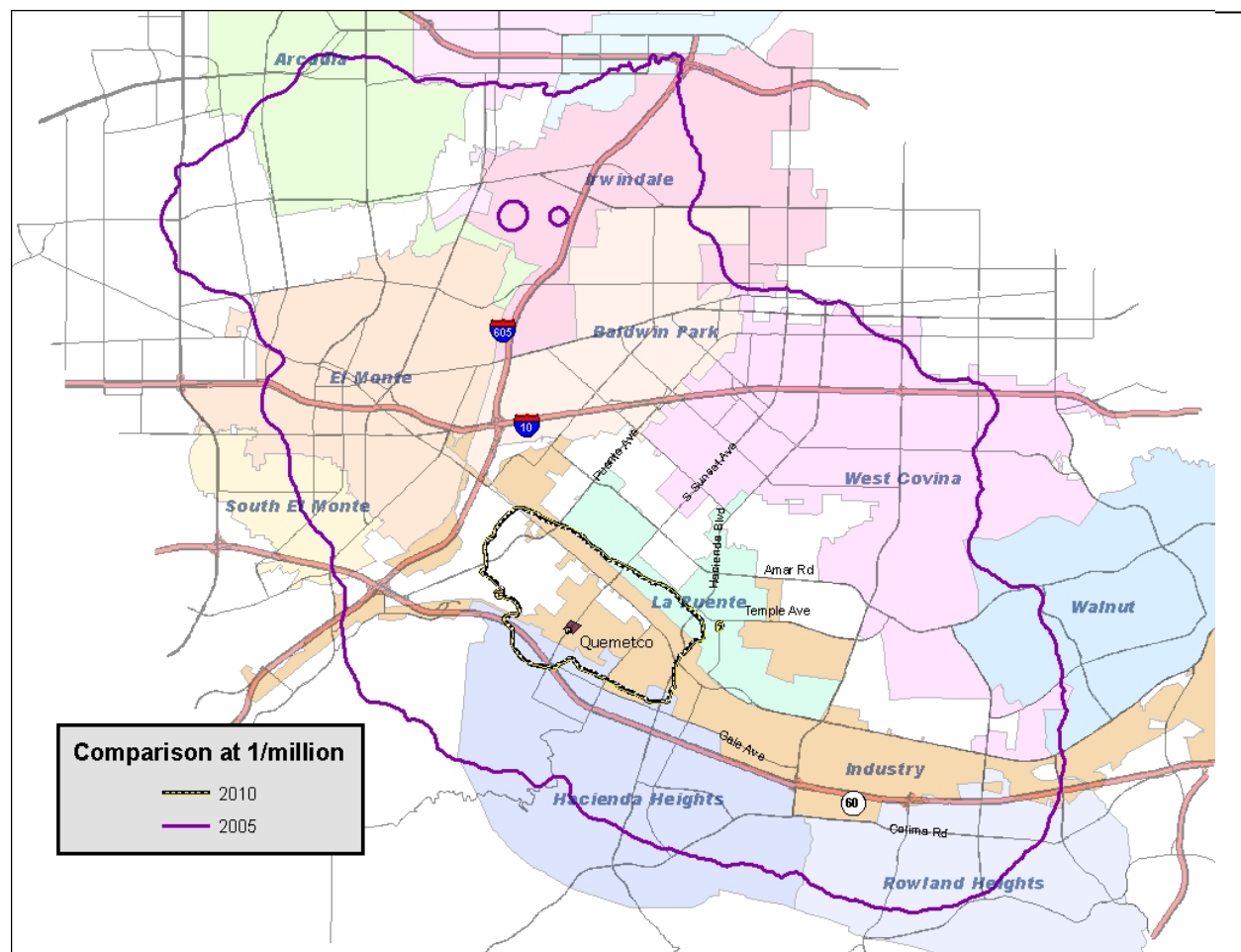
Quemetco is a secondary lead smelter located at 720 S. 7<sup>th</sup> Avenue, City of Industry, California. Their main activity is to recover lead from spent automobile batteries. The facility has been operating at this location since 1959. Persistent neighborhood odors, past violations of the lead health standard, recent permit actions, and the AB 2588 public notice has drawn much public interest.

Pursuant to AB 2588, Quemetco prepared an HRA in December 2000. Due to several public meetings and various comments, the AQMD modified their HRA and approved the modified HRA on December 16, 2005. The modified AB 2588 HRA depicted non-cancer risks of less than one, a maximum individual cancer risk of 21.8 in one million subjecting the facility to the AB 2588 public notice requirements, and a cancer burden of 1.15 triggering AQMD Rule 1402 risk reduction requirements. The cancer risk (2005) is presented in Figure 4. Quemetco provided public notice on January 17, 2006.

Pursuant to Rule 1402, Quemetco prepared a Risk Reduction Plan, subsequently approved by AQMD, and implemented by Quemetco. The Risk Reduction Plan proposed installation of a Wet Electrostatic Precipitator (WESP) to control particulates and metals, and possible installation of a regenerative thermal oxidizer (RTO) to control organics. Quemetco opted to install both the WESP and RTO.

Based on a permit condition, Quemetco conducted source tests in January 2009, and prepared and submitted an HRA (dated October 2009) to demonstrate compliance with Rule 1402. Quemetco is permitted at 600 tons/day maximum throughput. The source tests and subsequent HRA were based on the maximum throughput, as specified in their permit to operate. AQMD staff reviewed, modified, and approved as modified, the Quemetco HRA on February 23, 2010. The modified Rule 1402 HRA depicts a maximum individual cancer risk of 4.4 in one million, cancer burden of 0.023, and non-cancer risks less than one. (The cancer risk has been reduced by 80%. The cancer risks are presented in Figure 4). All health impacts are below the action risk levels in Rule 1402.

The one in a million isopleth from the December 2005 AB 2588 HRA covers 207 square kilometers. The one in a million isopleth from the February 2010 Rule 1402 HRA covers 11 square kilometers.



**Figure 4 - Quemetco Cancer Risk (2005 vs. 2010)**

(The larger contour (purple, if viewed in color) is the one in one million contour representing the maximum individual cancer risk from the December 2005 HRA which depicts the risks prior to implementation of the risk reduction plan. The smaller contour (dashed) is the one in a million contour that represents the maximum individual cancer risk from the February 2010 R1402 HRA that utilizes emissions data after implementation of the risk reduction plan.)

### **National-Scale Air Toxics Assessment Support**

Every three years, beginning in 1996, the U.S. EPA publishes a National-Scale Air Toxics Assessment (NATA).<sup>[8]</sup> NATA is analogous to AQMD's Multiple Air Toxic Exposure Study (MATES). Whereas MATES looks at population risks in the four county jurisdiction of the AQMD, the 50 states are addressed in NATA. The purpose of NATA is to: (1) identify and prioritize the toxic air contaminants of greatest concern, (2) determine the risk contribution from each of the major source categories (i.e., on-road, off-road, point, and area), and (3) identify local areas (i.e., census tracts) with elevated risks.

The Year 2002 NATA released in June 2009 identified a neighborhood in Cerritos, California as having the highest air toxic risk in the nation – with one chemical (hydrazine) from one metal processing facility accounting for over 95 percent of that risk. Following announcement of the report, AQMD staff examined the findings and noted that the facility location was erroneous in the NATA. Subsequently, AQMD staff determined that the 2002 NATA used antiquated data; that the facility actually emitted relatively minor amounts of hydrazine; and that the risks to the residents of Cerritos were grossly overstated. The agencies involved – U.S. EPA, California Air Resources Board (CARB), and the AQMD – thereafter committed to significantly improve the process. Specifically, U.S. EPA agreed to provide state and local air quality agencies with preliminary NATA findings prior to final release, in order to allow reasonable time to perform quality assurance checks.

To that end, U.S. EPA staff provided the preliminary draft 2005 Toxics Release Inventory (TRI) and NATA data in October 2009 along with a set of tools (i.e., reports and software) to assist in the review. AB 2588 staff participated in several webinars with U.S. EPA staff since and thoroughly reviewed the 57 high risk facilities (i.e., facilities with cancer risks > 100 in a million or a non-cancer chronic hazard index > 5) identified by U.S. EPA to be in our jurisdiction. AB 2588 staff review of the 2005 TRI and NATA revealed a fundamental problem with U.S. EPA's emission inventory approach. The data AQMD submitted to U.S. EPA via CARB was not used to replace previous data submittals, but to update emission data when it was for the same facility and the same pollutant. Business turnovers and material changes from more toxic to less toxic chemicals, primarily as a result of AQMD rules and regulations and other programs, were not recognized by the current method and the same toxic chemicals were carried over year to year as if they remained unchanged. Furthermore, U.S. EPA-developed emission factors were substituted for locally reported emission factors (e.g., landfill gas acrylonitrile emissions and hexavalent chromium estimated from total chrome reported in U.S. EPA's TRI). The following statistics illustrate the extent of the data inadequacies. Out of a total 57 high risk facilities, AB 2588 staff found that:

- 34 facilities were out of business; and
- 11 facilities had process changes prior to 2005 that eliminated the use of key toxic compounds.

AQMD communicated these issues to U.S. EPA and advocated that an improved data transfer protocol be developed among the agencies involved so that staff resources could be more efficiently directed to auditing true high risk facilities. U.S. EPA supports the formulation of a working group to develop specific quality assurance protocols for data submittal and evaluation.

Furthermore, staff compared the TRI data submitted to U.S. EPA with information submitted to the AQMD under the Annual Emissions Inventory program to understand the differences in NATA and other information relied upon by the U.S. EPA.

## **FUTURE ACTIVITIES**

In 2010, staff plans to perform the following tasks:

### **Update Facility Prioritization Procedures**

From the reported toxic emissions, AQMD prioritizes facilities into three categories: high priority, intermediate priority, and low priority. The current prioritization procedures utilize risk values identified by the OEHHA.

The OEHHA is required to develop guidelines for conducting health risk assessments under the AB 2588 “Hot Spots” Program (Health and Safety Code Section 44360(b)(2)). OEHHA initially developed Technical Support Documents (TSDs) in 1999-2000 in response to this statutory requirement, including one which listed and described the derivation of cancer potencies for individual air contaminants, and two which described acute and chronic Reference Exposure Levels (RELs). (A REL is an exposure level at or below which no non-cancer adverse health effect is anticipated to occur in a human population exposed for a specific duration). The OEHHA finalized the revised TSDs: “Air Toxics Hot Spots Program Technical Support Document for Cancer Potencies”, and “Air Toxics Hot Spots Program Technical Support Document for the Derivation of Non-cancer Reference Exposure Levels,” which are designed to replace those original TSDs. The revised TSDs present updated methodologies that reflect scientific knowledge and techniques developed since the previous guidelines were prepared. In addition to the previously defined acute and chronic RELs, the new method allows for the estimation of 8-hour RELs, which may be useful in dealing with some special circumstances in Hot Spots risk assessments. As a result, the Air Toxics Hot Spots Program Risk Assessment Guidelines have changed.

AB 2588 staff will update the current prioritization procedures to make it consistent with OEHHA’s revised risk guidelines and incorporating multi-pathway factors developed as part of the AQMD’s Risk Assessment Procedures for Rules 1401 – New Source Review of Air Toxic Compounds and 212 – Standards for Approving Permits and Issuing Public Notice, into the calculation procedures. There are two primary changes to the AQMD’s Risk Assessment Procedures: (1) different unit of measure for cancer potency and (2) revisions to the multi-pathway effects. Revisions to the unit of measures are consistent with OEHHA’s changes. Revisions to the multi-pathway effect include different exposure assumptions for workers and residents, indexing pollutant concentration body weight as opposed to volume of air, and different breathing rate for residents and workers.

### **Develop Internal Procedures for Addressing Emission Inventory, Risk Assessment, and Public Notification Procedures for the Other Industry-wide Categories**

Staff will develop an internal work plan for addressing emission inventory, risk assessment, and public notification procedures for additional Industry-wide categories, such as auto body shops..

**Continue to Notify Facilities with Prime DICEs**

Staff will continue to identify facilities with prime Diesel Internal Combustion Engines (DICEs), notify these facilities of the requirements to prepare and submit ATIR and HRA, followed by reviewing and approving these HRAs.

**Amend the Public Notification Procedures**

Staff plans to amend the current Public Notification Procedures such that future meetings are conducted by staff instead of facility personnel.

**U.S. EPA TRI and NATA Data**

In cooperation with the U.S. EPA and the CARB, develop toxic emission data handling protocols to improve the accuracy of future NATA reports, and continue to review future TRI and NATA data.

**Continue to Prioritize AB 2588 Facilities**

Staff will prioritize AB 2588 facilities and notify those with high priority scores to prepare detailed Air Toxics Inventory Reports (ATIRs) and HRAs.

**HRA and ATIR Review and Approval**

There are about 13 facility HRAs in addition to 4 detailed ATIRs that are either under review or will be submitted in the first half of 2010. Seven of these HRAs are from major refineries. An important task for the coming year is to review and approve these ATIRs and HRAs.

As U.S. EPA updates its inventory data, staff will continue to review data relevant to AQMD for accuracy and consistency with local data reported by the facilities.

## REFERENCES

- [1] OEHHA. 2003. The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. The document is available at [http://www.oehha.org/air/hot\\_spots/HRAguidefinal.html](http://www.oehha.org/air/hot_spots/HRAguidefinal.html).
- [2] AQMD. 2005. Supplemental Guidelines for Preparing Risk Assessments to Comply with the Air Toxics 'Hot Spots' Information and Assessment Act. The document is available at [http://www.aqmd.gov/prdas/AB2588/AB2588AB2588\\_B3.html](http://www.aqmd.gov/prdas/AB2588/AB2588AB2588_B3.html) under the bullet item labeled "AQMD risk assessment guidelines."
- [3] CARB. 2005. Hotspots Analysis and Reporting Program (HARP). Link to HARP is <http://www.arb.ca.gov/toxics/harp/harp.htm>.
- [4] CAPCOA. 1996. Auto Bodyshop Industry-wide Risk Assessment Guidelines. Prepared by CAPCOA, September 1996. The document is located at the following link: <http://www.arb.ca.gov/ab2588/riskassess.htm>.
- [5] CAPCOA. 1997. Gasoline Service Station Industry-wide Risk Assessment Guidelines. Prepared by CAPCOA, December 1997. The document is located at the following link: <http://www.arb.ca.gov/ab2588/riskassess.htm>.
- [6] CAPCOA. 2003. Perchloroethylene Dry Cleaner Industry-wide Risk Assessment Guidelines. Prepared by CAPCOA, January 13, 2003 (Draft). The document is located at the following link: <http://www.arb.ca.gov/ab2588/riskassess.htm>.
- [7] AQMD. 1994. Public Notification Procedures for Phase I and II Facilities under the Air Toxics 'Hot Spots' Information and Assessment Act of 1987 (AB 2588). The document is available at [http://www.aqmd.gov/prdas/AB2588/AB2588\\_B4.html](http://www.aqmd.gov/prdas/AB2588/AB2588_B4.html) under the bullet item labeled "AQMD Public Notification Procedures."
- [8] The U.S. EPA's web portal to NATA is available at: <http://www.epa.gov/ttn/atw/natamain/>.

## **Appendix A**

### **Health Risk from Facilities with an Approved Health Risk Assessment (HRA)**

The table in Appendix A lists the facilities and the current risks as reviewed and approved by the AB 2588 staff. In most instances, the listed risks are from an approved HRA. However, in some instances, the risks are those after the implementation of a risk reduction plan. See Table 1 included in the report for the status of the facility's risk reduction plan. Attention should also be given to the other footnotes in the table denoting facilities with updated HRAs pending approval and facilities with risk including emergency DICEs. It also provides current status of each facility as follows:

- A – Active
- I – Inactive
- OB – Out of business

Staff realizes that facilities that have gone through change of ownership could have different name and facility ID numbers. To keep the historical data intact, the facility name and IDs in Appendix A represent the information that was valid at the time that the HRA was finalized. The table lists the facilities in the order of their cancer risk. The following risk levels are identified in AQMD Rule 1402 – Control of Toxic Air Contaminants from Existing Sources:

- **Action Risk Levels:** Cancer risk  $\geq 25$  in a million; Acute HI  $\geq 3.0$ ; Chronic HI  $\geq 3.0$ , Cancer Burden  $\geq 0.5$
- **Public Notification Levels:** Cancer risk  $\geq 10$  in a million; Acute HI  $> 1.0$ ; Chronic HI  $> 1.0$
- **Exemption Levels:** Cancer risk  $< 1$  in a million; Acute HI  $< 0.1$ ; Chronic HI  $< 0.1$

## Appendix A

### Health Risks from Facilities with an Approved HRA

Facility ID	Facility Status	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
122822	I	CONSOLIDATED FILM INDUSTRIES	Hollywood	21.00	n/a	0.11	0.40	2000
45448	A	GAS RECOVERY SYSTEMS, INC.	Irvine	20.1	0.18	0.56	0.32	2009
14495	A	VISTA METALS CORP.	Fontana	19.80	0.057	0.01	0.29	2008
126501	A	VOUGHT AIRCRAFT INDUSTRIES (c)	Hawthorne	19.70	n/a	0.64	0.24	2001
114927	A	ANVIL CASES / A CALZONE COMPANY	Industry	19.00	n/a	0.13	0.08	2002
11142	OB	KEYSOR-CENTURY CORP	Saugus	17.00	n/a	0.54	0.06	2000
18989	A	BOWMAN PLATING CO. INC.	Compton	14.20	0.021	<0.01	<0.01	2007
41229	A	LUBECO, INC.	Long Beach	14.02	n/a	0.00	0.12	2003
35302	A	OWENS CORNING FIBERGLASS CORP. (a)	Compton	14.00	0.015	0.07	0.10	2000
48323	A	SIGMA PLATING COMPANY	La Puente	13.84	0.017	0.01	0.74	2004
18648	OB	CROWN CITY PLATING COMPANY	El Monte	11.99	0.130	0.39	0.13	2000
29110	A	OR. CO., SANITATION DIST	Huntington Beach	10.70 (b)	0.210	1.78	0.48	2007
106797	OB	SAINT-GOBAIN CONTAINERS LLC	Los Angeles	9.85	n/a	0.00	0.07	2000
101380	OB	GENERAL DYNAMICS OTS (DOWNEY) INC	Downey	9.80	n/a	0.01	0.05	2000
148925	A	CHERRY TEXTRON	Santa Ana	9.70	n/a	0.07	0.15	1999
800183	A	PARAMOUNT PETROLEUM CORPORATION	Paramount	9.61	n/a	0.02	0.01	2002
800318	A	GRISWOLD INDUSTRIES	Costa Mesa	9.51	0.009	0.10	0.01	2001
15504	A	SCHLOSSER FORGE CO.	Rancho Cucamonga	9.50	0.067	1.59	1.11	2003
800149	A	US BORAX & CHEM CORP	Wilmington	9.46	n/a	0.00	0.03	2000
10510	OB	GREGG INDUSTRIES INC.	El Monte	9.40	0.010	0.60	0.56	2008



## Appendix A. Continued.

Facility ID	Facility Status	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
155828	A	GARRETT AVIATION SERVICES INC.	Los Angeles	9.33	n/a	0.91	0.10	2005
42922	OB	CMC PRINTED BAG INC	Whittier	9.00	n/a	<0.01	<0.01	1995
800396	A	BP WEST COAST PRODUCTS, ARCO VINVALE	South Gate	9.00	0.023	<0.01	0.03	1994
3525	A	P.B. FASTENERS	Gardena	8.91	0.010	0.09	0.06	1999
800089	A	EXXON-MOBIL OIL CORPORATION	Torrance	8.90	0.380	0.06	0.05	2001
1744	A	KIRKHILL RUBBER CO	Brea	8.70	0.001	0.20	0.06	2007
800431	A	PRATT & WHITNEY ROCKETDYNE, INC.	Canoga Park	8.70	0.130	<0.01	<0.01	1995
44454	A	STRUCTURAL COMPOSITES INDUSTRIES, INC.	Pomona	8.60	0.001	0.01	0.23	2002
800363	A	CONOCO-PHILLIPS CO.	Wilmington	8.60	0.282	0.98	0.07	2001
2680	A	LA CO., SANITATION DISTRICT	Whittier	8.57	n/a	0.00	0.03	1999
15736	A	HENRY CO	Hunt. Park	8.50	0.026	0.00	0.00	2000
800057	A	GATX TANK STORAGE TERMINAL CORP	Carson	8.50	n/a	0.01	0.06	1999
800079	A	PETRO DIAMOND TERMINAL CO	Long Beach	8.30	n/a	0.00	0.16	1998
125281	OB	MODERN PLATING ALCO CAD-NICKEL PLATING	Los Angeles	8.20	n/a	0.10	0.01	1997
21615	OB	OPTICAL RADIATION CORP	Azusa	8.08	n/a	0.17	0.10	1998
110924	A	WESTWAY TERMINAL COMPANY	San Pedro	8.00	0.370	0.33	0.51	1997
3609	A	AL'S PLATING CO INC	Los Angeles	7.81	n/a	0.26	0.17	1999
37603	A	POLYCARBON INC	Valencia	7.80	0.012	0.01	0.36	1998
800182	A	RIVERSIDE CEMENT CO. (a)	Riverside	7.80	n/a	0.05	0.13	2001
800436	A	TESORO REFINING AND MARKETING CO	Wilmington	7.80	n/a	0.33	0.45	2000
13920	A	ST. JOSEPH HOSPITAL	Orange	7.73	0.014	0.79	0.26	2008
18294	A	NORTHROP CORP., AIRCRAFT DIV. - WEST	El Segundo	7.60	n/a	0.13	0.05	2000

## Appendix A. Continued.

Facility ID	Facility Status	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
113170	A	SANTA MONICA HOSPITAL MEDICAL CTR UNIT 2 (c)	Santa Monica	7.60	0.000	0.17	0.01	1997
800214	A	LA CITY, HYPERION TREATMENT PLANT (a)	Playa del Rey	7.59	0.027	0.06	0.01	1999
20197	A	LAC/USC MEDICAL CENTER	Los Angeles	7.50	0.031	0.70	0.38	2007
800032	A	CHEVRON U.S.A. INC	Montebello	7.46	0.143	0.01	0.18	1999
800150	A	US GOVT., AF DEPT, MARCH AFB	Riverside	7.35	0.020	0.31	0.01	2008
108701	A	BALL FOSTER GLASS CONTAINER CO.	El Monte	7.30	0.056	0.09	0.07	2000
117560	A	EQUILON ENTER, LLC-SHELL OIL PROD. US	Wilmington	7.30	n/a	0.03	0.07	1998
131003	A	BP WEST COAST PRODUCTS LLC	Carson	7.28	n/a	0.30	0.08	2000
800113	A	ROHR IND INC	Riverside	7.20	0.011	0.86	0.02	2007
800236	A	LA CO., SANITATION DIST UNIT NO.01	Carson	7.20	0.058	0.17	0.12	2007
49387	A	UNIV CAL RIVERSIDE	Riverside	7.13	0.220	0.00	0.04	1999
57094	A	G S ROOFING PRODUCTS CO INC (a)	Wilmington	7.00	n/a	0.01	0.01	2000
140499	A	AMERESCO HUNTINGTON BEACH, LLC	Huntington Beach	7.00	n/a	<0.01	<0.01	1995
55449	A	BKK CORPORATION, LANDFILL DIVISION GNRL	W. Covina	6.90	n/a	0.01	0.10	2000
800372	A	EQUILON ENTERPRISES,LLC	Carson	6.90	0.030	0.44	0.07	2001
5723	A	AEROCHEM INC	Orange	6.70	0.004	0.02	0.10	1999
34764	A	CADDOCK ELECTRONICS, INC.	Riverside	6.70	0.034	0.01	0.09	2002
8570	A	EMBEE INC	Santa Ana	6.62	n/a	0.21	0.58	2001
17301	A	OR CO., SANITATION DIST	Fountain Valley	6.60	0.032	0.39	0.34	2007
6643	A	TECHNICOLOR, INC	N. Hollywood	6.53	0.003	0.03	0.08	2007
141585	A	RESOLUTION SPECIALTY MATERIALS, LLC	Lynwood	6.50	0.150	0.13	1.60	1995
11726	A	GE ENGINE SERVICES	Ontario	6.46	n/a	0.12	0.59	1999

## Appendix A. Continued.

Facility ID	Facility Status	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
2852	A	WALT DISNEY CO	Burbank	6.40	0.031	0.02	0.02	1997
800066	A	HITCO	Gardena	6.40	0.310	0.34	0.05	1998
1226	A	HYATT DIE CAST & ENGINEERING CORP	Cypress	6.24	0.008	<0.01	0.12	1996
800067	A	BOEING SATELLITE SYSTEMS INC	El Segundo	6.22	n/a	0.03	0.08	2000
146570	A	ROHM AND HAAS CHEMICALS LLC	La Mirada	6.20	n/a	0.54	0.76	1999
45262	A	LA CO, SANITATION DISTRICT UNIT NO.02	Glendale	6.17	n/a	0.01	0.05	1998
800026	A	ULTRAMAR INC.	Wilmington	6.08	n/a	0.80	0.07	2002
800267	A	DV INDUSTRIES, INC.	Lynwood	6.06	0.000	<0.01	0.01	2007
140961	A	GKN AEROSPACE TRANSPARENCY SYS INC	Garden Grove	6.00	n/a	<0.01	0.49	1996
800022	A	CALNEV PIPE LINE CO	Bloomington	5.90	n/a	0.00	0.07	1999
800198	A	ULTRAMAR INC	Wilmington	5.90	n/a	0.01	0.09	1999
800279	A	SFPP, L.P.	Orange	5.85	n/a	0.00	0.24	1999
8578	OB	ASSOCIATED CONCRETE PROD. INC	Santa Ana	5.80	n/a	0.13	0.57	1999
136148	A	E/M CORP, GREAT LAKES CHEMICAL CORP SUB	N Hollywood	5.80	0.000	0.28	0.57	1998
800129	A	SO PACIFIC PIPELINES INC	Rialto	5.75	n/a	<0.01	0.02	1996
154540	A	ARROWHEAD BRASS PROD. INC	Los Angeles	5.70	n/a	0.26	0.04	1995
800288	A	UNIV CAL IRVINE UNIT NO 01	Irvine	5.64	n/a	0.00	0.07	1996
22410	A	PALACE PLATING	Los Angeles	5.60	n/a	0.73	0.38	2004
38971	A	RICOH ELECTRONICS INC	Irvine	5.60	0.007	0.02	0.39	1995
43201	A	SNOW SUMMIT SKI CORP	Big Bear Lake	5.53	0.003	0.01	0.01	2007
14146	A	MAC GREGOR YACHT CORP	Costa Mesa	5.50	n/a	0.00	0.10	1998
54424	A	L & L CUSTOM SHUTTERS	Placentia	5.50	0.000	0.15	0.21	2001

## Appendix A. Continued.

Facility ID	Facility Status	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
800409	A	TRW INC.	Redondo Beach	5.48	n/a	0.45	0.24	1998
800196	A	AMERICAN AIRLINES, INC.	Los Angeles	5.40	0.190	0.86	0.08	2005
800171	A	MOBIL OIL CO	Vernon	5.33	0.016	0.07	0.02	1997
134018	A	INDUSTRIAL CONTAINER SERVICES	Montebello	5.24	n/a	0.57	0.23	2000
4477	A	SOUTHERN CALIFORNIA EDISON COMPANY	Avalon	4.98	0.004	0.05	0.20	1997
109198	A	TORCH OPERATING CO. (STEARNS GAS CO)	Brea	4.97	n/a	0.05	0.01	2001
800037	A	DEMENNO/KERDOON	Compton	4.9	0.01	<0.01	0.02	2009
103888	A	A J INDUSTRIES INC, SARGENT-FLETCHER CO	El Monte	4.90	0.280	0.16	0.02	1999
11192	A	HI-SHEAR CORP	Torrance	4.80	0.002	0.04	0.02	2008
800038	A	DOUGLAS AIRCRAFT CO	Long Beach	4.80	n/a	0.15	0.11	1999
800264	A	EDGINGTON OIL, CO.	Long Beach	4.78	0.001	0.01	0.01	2002
101977	A	AMERIGAS PROPANE L.P.	Long Beach	4.70	0.002	0.59	0.97	1998
3950	A	CROWN CORK & SEAL COMPANY, INC.	La Mirada	4.60	0.000	0.00	0.11	1997
83102	A	LIGHT METALS	Industry	4.50	0.008	0.04	2.70	2002
8547	A	QUEMETCO INC.	Industry	4.4	0.023	0.086	0.74	2010
37336	A	COMMERCE REFUSE TO ENERGY FACILITY (a)	Commerce	4.40	0.160	0.03	0.08	1997
136395	A	THOMASON MECHNICAL CORP, BENDER MACHINE	Vernon	4.40	0.001	0.99	0.02	2002
800041	A	DOW U.S.A.	Torrance	4.40	n/a	0.09	0.01	2000
93346	A	COOPER DRUM CO	S. El Monte	4.30	n/a	0.09	0.16	1997
115240	A	MARCHEM TECHNOLOGIES, LONZA INC	Long Beach	4.30	0.005	0.28	0.01	2001
131249	A	BP WEST COAST PRODUCTS LLC (a)	Wilmington	4.30	0.180	0.08	0.18	1995
124506	A	BOEING ELECTRON DYNAMIC DEVICES	Torrance	4.17	n/a	0.46	0.07	1995

## Appendix A. Continued.

Facility ID	Facility Status	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
6459	OB	HONEYWELL INTERNATIONAL INC.	Vernon	4.13	n/a	0.01	0.01	1999
18439	OB	ACE PLATING CO INC	Los Angeles	4.08	n/a	0.58	0.19	1998
118406	A	CARSON COGENERATION COMPANY	Carson	3.86	n/a	0.16	0.01	2007
45489	A	GUIDANT CORP	Temecula	3.80	0.006	1.31	0.01	2002
126060	A	STERIGENICS US, LLC	Ontario	3.80	0.000	0.00	0.01	2007
8820	A	REULAND ELECTRIC CO. H.BRITTON LEES	Industry	3.70	0.002	<0.01	<0.01	1996
9114	I	SOMITEX PRINTS OF CALIFORNIA	Industry	3.70	n/a	0.06	<0.01	1996
17325	A	ACE CLEARWATER ENTERPRISES	Paramount	3.70	0.001	0.01	0.00	2002
106838	A	VALLEY-TODECO, INC	Sylmar	3.70	0.000	0.20	0.20	2000
105598	A	SENIOR FLEXONICS INC	Burbank	3.64	0.007	0.98	0.49	2001
7427	A	OWENS-BROCKWAY GLASS CONTAINER	Vernon	3.60	0.000	0.01	0.06	2001
800007	OB	ALLIED SIGNAL INC, EI SEGUNDO	El Segundo	3.58	n/a	0.02	0.53	2000
126197	A	ION BEAM APPLICATIONS INC.	Los Angeles	3.56	0.000	<0.01	0.01	1996
127568	A	ENGINEERED POLYMER SOLUTION	Montebello	3.53	0.000	0.05	0.48	2000
151899	A	MEDALLION CALIFORNIA PROPERTIES CO	Newhall	3.51	n/a	0.02	0.20	2000
140811	A	DUCOMMUN AEROSTRUCTURES INC	Monrovia	3.50	0.007	0.01	0.01	2002
8015	A	ANADITE INC	South Gate	3.48	n/a	0.63	0.78	2003
9163	A	INLAND EMPIRE UTILITIES AGENCY	Ontario	3.44	0.001	0.25	0.01	2007
151415	A	AERA ENERGY LLC	Brea	3.40	0.020	0.05	0.00	1999
153546	A	HUCK INTERNATIONAL INC	Carson	3.30	0.017	0.00	0.02	1999
126191	A	ION BEAM APPLICATIONS INC.	Los Angeles	3.29	0.000	<0.01	0.00	1996
800063	A	GROVER PROD. CO	Los Angeles	3.29	0.039	0.88	0.07	2002

## Appendix A. Continued.

Facility ID	Facility Status	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
800189	A	DISNEYLAND RESORT	Anaheim	3.25	0.030	0.11	0.06	2009
6384	A	LA CO., RANCHO LOS AMIGOS MEDICAL CENTER	Downey	3.14	0.082	0.01	0.06	1999
800362	A	CONOCO-PHILLIPS CO.	Carson	3.10	n/a	0.67	0.26	2001
11435	A	THE PQ CORP	South Gate	3.00	n/a	0.00	0.01	1998
800395	A	BP WEST COAST PRODUCTS, ARCO CARSON	Carson	3.00	0.001	<0.01	0.02	1994
10005	A	ELECTRONIC CHROME GRINDING CO, INC.	Santa Fe Springs	2.96	0.010	0.24	0.06	2001
52517	A	REXAM PLC, REXAM BEVERAGE CAN COMPANY	Chatsworth	2.93	0.0076	0.73	0.1	2009
18452	A	UCLA (REGENTS OF UC) (a)	Los Angeles	2.91	n/a	0.01	0.11	1999
2613	A	US GOVT, NAVY DEPT, NAVAL WEAPONS STN	Seal Beach	2.90	0.004	0.11	0.00	2002
16660	A	MC DONNELL DOUGLAS SPACE SYS CO. sub of BOEING CO.	Huntington Beach	2.89	0.001	0.23	0.05	2007
116868	A	EQUILON ENTERPRISES,LLC	Rialto	2.88	n/a	0.00	0.04	1999
800035	A	CONTINENTAL AIRLINES INC	Los Angeles	2.83	n/a	0.01	0.13	1997
48274	A	FENDER MUSICAL INST	Corona	2.81	0.004	0.03	0.37	1997
151798	A	TESORO REFINING AND MARKETING CO.	Carson	2.77	n/a	0.14	0.00	1999
151984	A	TESORO REFINING AND MARKETING CO.	Wilmington	2.75	0.002	0.00	0.01	2000
46268	A	CALIFORNIA STEEL INDUSTRIES, INC.	Fontana	2.74	0.016	0.16	0.31	1995
800030	A	CHEVRON U.S.A. INC	El Segundo	2.73	n/a	0.29	0.13	2001
5887	A	ANABOLIC INC	Irvine	2.70	0.154	0.03	0.00	1997
16642	A	ANHEUSER-BUSCH INC.(LA BREWERY)	Van Nuys	2.70	n/a	0.02	0.13	1999
25440	A	ROBERTSHAW CONTROLS CO, GRAYSON CONTROLS	Long Beach	2.70	0.003	0.00	0.96	1998
27701	A	CADDOCK ELECTRONICS, INC.	Riverside	2.70	n/a	0.02	0.06	2002
137517	A	RELIANT ENERGY ETIWANDA,LLC	Etiwanda	2.67	0.160	0.01	0.17	2000

## Appendix A. Continued.

Facility ID	Facility Status	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
133987	A	PLAINS EXPLORATION & PRODUCTION CO. LP	Inglewood	2.65	n/a	0.01	0.07	1997
134943	A	ALCOA GLOBAL FASTERNERS, INC.	Torrance	2.61	n/a	0.55	0.04	2008
35483	A	WARNER BROTHERS STUDIO FACILITIES	Burbank	2.60	0.008	0.10	0.26	1997
7949	A	CUSTOM FIBERGLASS MFG CO/CUSTOM HARDTOP	Long Beach	2.50	0.078	<0.01	<0.01	1995
79682	A	RAMCAR BATTERIES INC	Commerce	2.43	n/a	0.04	0.17	1998
800278	A	SFPP, L.P.	Carson	2.43	n/a	0.00	0.10	1999
18188	A	PLASMA TECHNOLOGY INC.	Torrance	2.40	0.000	0.11	0.00	2007
18508	A	AIR PROD & CHEM INC, PACIFIC ANCHOR CHEM	Los Angeles	2.40	0.000	0.10	0.81	1999
800202	A	UNIVERSAL STUDIOS INC	Universal City	2.40	n/a	<0.01	0.03	1996
800387	A	CALIFORNIA INSTITUTE OF TECHNOLOGY	Pasadena	2.40	n/a	0.05	0.00	2007
152033	A	TESORO REFINING AND MARKETING CO.	Long Beach	2.39	n/a	0.00	0.01	1999
133405	A	BODYCOTE INC./BODYCOTE THERMAL PROCESSING	Los Angeles	2.36	n/a	0.03	0.20	1999
1208	A	MICROSEMI CORPORATION	Santa Ana	2.30	0.004	0.01	0.01	2001
124838	A	EXIDE TECHNOLOGIES (a)	Vernon	2.30	0.010	0.53	0.04	1999
800056	A	GATX STORAGE TERMINALS CORP	San Pedro	2.30	n/a	0.00	0.03	1997
103659	OB	FOUR MEDIA CO.	Burbank	2.22	n/a	0.61	0.04	2004
99773	A	CYTEC FIBERITE INC.	Anaheim	2.20	0.000	0.04	0.19	2000
9668	A	DELUXE LABORATORIES INC, DELUXE LABORATOR	Hollywood	2.10	0.000	0.01	0.02	2000
40829	A	HAWKER PACIFIC INC	Sun Valley	2.07	0.000	0.04	0.09	2009
18931	A	TAMCO	Rancho Cucamonga	2.04	0.017	0.01	0.24	2001
142267	A	FS PRECISION TECH LLC	Rancho Dominguez	2.03	n/a	0.08	0.15	2001
800181	A	CALIFORNIA PORTLAND CEMENT CO (a)	Colton	2.00	0.001	<0.01	0.39	1996

## Appendix A. Continued.

Facility ID	Facility Status	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
2605	A	3M CO	Northridge	1.98	0.002	0.40	0.38	1996
14502	A	VERNON UTILITY DEPARTMENT	Vernon	1.98	0.000	0.01	0.01	2007
54627	A	HICKORY SPRINGS OF CAL INC	Commerce	1.95	n/a	0.01	0.48	1998
800325	A	TIDELANDS OIL PRODUCTION CO (L.B. Oil Co)	Long Beach	1.90	n/a	0.07	0.62	1999
10245	A	LA CITY SANITATION BUREAU, TERMINAL ISLAN	San Pedro	1.83	0.005	0.02	0.03	2000
23559	OB	JOHNSON CONTROLS BATTERY GROUP INC	Fullerton	1.80	n/a	0.01	0.08	2001
800003	A	HONEYWELL INTERNATIONAL INC	Torrance	1.77	n/a	0.00	0.01	1999
1947	A	THUMS LONG BEACH CO, UNIT NO.01	Long Beach	1.70	0.170	<0.01	0.14	1996
8309	A	CAMBRO MANUFACTURING CO	Huntington Beach	1.70	0.002	0.00	0.15	2000
22467	A	LEFIELL MFG CO	Santa Fe Springs	1.70	0.000	0.75	0.17	2000
82512	A	BREA CANYON OIL CO	Wilmington	1.70	n/a	0.01	<0.01	1996
119907	A	BERRY PETROLEUM	Santa Clarita	1.60	n/a	0.20	0.73	1999
119920	A	ALUMINUM COMPANY OF AMERICA	Vernon	1.60	n/a	0.30	0.30	1996
133660	A	HAYDEN INDUSTRIAL PRODUCTS	Corona	1.60	n/a	0.82	0.44	1998
107350	A	N O-RING CORPORATION	Downey	1.53	n/a	0.00	0.01	2001
2638	A	OCCIDENTAL COLLEGE	Los Angeles	1.50	0.002	0.07	0.01	2007
126536	A	CONSOLIDATED FOUNDRIES, POMONA	Pomona	1.50	n/a	0.00	0.02	1999
25070	A	LA CO., SANITATION DISTRICT (a)	Whittier	1.40	0.001	<0.01	<0.01	1996
44577	A	LONG BEACH CITY, SERRF PROJECT (a)	Long Beach	1.40	n/a	0.00	0.03	2000
82513	A	BREA CANYON OIL COMPANY INC	Harbor City	1.40	n/a	0.02	<0.01	1996
800408	A	TRW INC.	Manhattan Beach	1.37	n/a	0.92	0.10	1998
3968	A	TABC INC.	Long Beach	1.35	0.002	0.05	0.22	1999



## Appendix A. Continued.

Facility ID	Facility Status	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
62679	A	KOP-COAT INC	Vernon	1.33	n/a	0.00	0.49	1997
123087	A	INDALEX WEST INC.	Industry	1.27	n/a	0.00	0.03	1999
126544	A	PAC FOUNDRIES INDUSTRY	Industry	1.27	n/a	0.59	0.09	1996
2526	A	CHEVRON USA INC	Van Nuys	1.25	0.007	<0.01	0.01	1996
22551	A	THUMS LONG BEACH CO, UNIT NO.04	Long Beach	1.20	0.000	0.00	0.01	2000
42633	A	LA CO., SANITATION DIST, SPADRA LANDFILL	Walnut	1.20	0.002	<0.01	<0.01	1996
106009	A	VENOCO INC.	Beverly Hills	1.16	n/a	0.05	0.00	2005
152054	A	BREA CANYON OIL COMPANY, INC.	Brea	1.14	n/a	<0.01	0.12	1996
124806	OB	EXIDE TECHNOLOGIES	Industry	1.00	n/a	0.00	0.04	1999
800127	A	THE GAS CO.	Montebello	0.99	0.000	0.01	0.01	2009
7730	A	E R CARPENTER CO INC	Riverside	0.96	0.000	0.03	1.34	2003
20375	A	PRUDENTIAL OVERALL SUPPLY	Riverside	0.96	0.000	0.03	0.08	1997
6670	A	TRU-CUT, INC.	Los Angeles	< 1	0.000	0.00	0.04	2002
47056	OB	MYERS CONTAINER CORP	Huntington Park	0.90	0.000	0.23	2.00	2002
800301	A	ITT GILFILLAN UNIT NO.01	Van Nuys	0.86	0.000	0.12	0.19	1998
3134	A	THUMS LONG BEACH CO, UNIT NO.05	Long Beach	0.84	0.000	<0.01	<0.01	1996
18378	A	GRUBER SYSTEMS, INC.	Valencia	0.83	0.000	0.14	0.10	2004
22556	A	THUMS LONG BEACH CO, UNIT NO.02	Long Beach	0.80	0.000	<0.01	<0.01	1996
111415	A	VAN CAN CO, SUBSIDIARY OF VAN CAMP SEAFO	Fontana	0.80	0.000	<0.01	0.08	1996
120088	A	BREITBURN ENERGY CO.	Santa Fe Springs	0.79	0.000	0.01	0.04	1998
126964	A	EDWARDS LIFESCIENCES LLC	Irvine	0.75	0.000	<0.01	0.00	1995
22373	A	CONTAINER CORPORATION OF AMERICA	Los Angeles	0.74	0.000	<0.01	<0.01	1996

## Appendix A. Continued.

Facility ID	Facility Status	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
24060	A	TOMKINS INDUSTRIES INC-LASCO PRODS GROUP	Anaheim	0.72	0.000	<0.01	0.02	1996
800091	A	MOBIL OIL CORP	Anaheim	0.72	0.000	0.01	0.00	1999
772	A	DEFT INC	Irvine	0.70	0.000	<0.01	<0.01	1995
24756	A	CRANE CO, HYDRO-AIRE DIV	Burbank	0.63	0.000	0.04	0.05	1997
115394	A	AES ALAMITOS, LLC	Long Beach	0.63	0.000	0.00	0.02	1999
134931	A	ALCOA GLOBAL FASTENERS, INC.	Fullerton	0.61	0.000	1.90	0.02	2003
24957	A	GLENDALE CITY	Glendale	0.59	0.000	0.00	0.02	1999
15647	A	CUSTOM ENAMELERS INC	Fountain Valley	0.55	0.000	0.11	0.02	2000
3093	A	LA CO., OLIVE VIEW/UCLA MEDICAL CENTER	Sylmar	0.53	0.000	0.00	0.02	1999
21895	A	AC PRODUCTS, INC.	Placentia	0.53	0.000	0.00	0.00	2003
6281	A	US GOVT,MARINE CORPS AIR STATION,EL TORO	El Toro	0.51	0.000	<0.01	<0.01	1996
1634	OB	STEELCASE INC, WESTERN DIV	Tustin	0.50	0.000	<0.01	<0.01	1995
39388	A	THUMS LONG BEACH CO, UNIT NO.03	Long Beach	0.50	0.000	<0.01	<0.01	1996
61160	A	GE ENGINE SERVICES	Ontario	0.50	0.000	0.70	0.01	2003
152501	A	PRECISION SPECIALTY METALS, INC.	Los Angeles	0.45	0.000	0.38	0.15	2001
43436	A	TIMCO	Fontana	0.43	0.000	0.00	0.43	1997
18990	A	LIFE PAINT COMPANY	Santa Fe Springs	0.41	0.000	0.02	0.00	2001
12660	I	GOLDSHIELD FIBERGLASS, INC, PLANT #58	Fontana	0.40	0.000	0.01	0.05	1994
115536	A	AES REDONDO BEACH, LLC	Redondo Beach	0.40	0.000	0.01	0.04	1998
122295	A	FALCON FOAM, A DIV OF ALTAS ROOFING	Los Angeles	0.40	0.000	0.00	0.00	1999
115663	A	EL SEGUNDO POWER, LLC	El Segundo	0.34	0.000	0.00	0.01	2000
25638	A	BURBANK CITY, PUB SERV DEPT	Burbank	0.33	0.000	0.33	0.01	1996

## Appendix A. Continued.

Facility ID	Facility Status	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
124805	A	EXIDE TECHNOLOGIES	Commerce	0.33	0.000	0.00	0.04	2000
550	A	LA CO., INTERNAL SERVICE DEPT	Los Angeles	0.32	0.000	0.02	0.00	2008
112192	OB	CONSOLIDATED DRUM RECONDITIONING CO. INC.	South Gate	0.31	0.000	0.00	0.00	1997
800343	A	BOEING SATELLITE SYSTEMS, INC.	El Segundo	0.30	0.000	<0.01	0.21	1996
24520	A	LA CO, SANITATION DISTRICTS	Rolling Hills Estates	0.29	0.000	<0.01	<0.01	1998
99119	A	INTERPLASTIC CORP	Hawthorne	0.28	0.000	0.05	0.32	1999
122300	A	BASF CORPORATION	Colton	0.28	0.000	0.56	0.02	2002
19989	OB	PARKER HANNIFIN AEROSPACE CORP	Irvine	0.27	0.000	0.01	0.00	1999
107149	A	MARKLAND MANUFACTURING INC.	Santa Ana	0.26	0.000	0.06	0.12	2007
102075	A	FOAMEX (a)	Orange	0.18	0.000	0.39	0.43	1994
16264	A	INTL COATINGS CO INC	Cerritos	0.17	0.000	0.00	0.00	1999
800074	A	LA CITY, DWP HAYNES GENERATING STATION	Long Beach	0.17	0.000	0.00	0.01	2000
48300	A	PRECISION TUBE BENDING	Santa Fe Springs	0.15	0.000	0.00	0.00	2002
800168	A	PASADENA CITY, DWP	Pasadena	0.15	0.000	0.70	0.00	1996
800193	A	LA CITY, DWP; VALLEY STM PLANT	Sun Valley	0.15	0.000	0.25	0.00	1999
42676	A	AES PLACERITA, INC.	Newhall	0.11	0.000	0.08	0.01	2003
114801	A	RHODIA INC.	Carson	0.11	0.000	0.02	0.05	2006
115389	A	SO CAL EDISON CO	Huntington Beach	0.11	0.000	0.00	0.00	1999
7416	A	PRAXAIR INC	Wilmington	0.11	0.000	0.04	0.03	2001
1992	A	PRUDENTIAL OVERALL SUPPLY	Van Nuys	0.10	0.000	0.00	0.00	1997
16044	I	SPECIALTY ORGANICS INC	Irwindale	0.10	0.000	0.00	0.23	1997
25012	A	AMADA MFG AMERICA, INC.	La Mirada	<0.1	0.000	0.00	0.00	2002

## Appendix A. Continued.

Facility ID	Facility Status	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
24812	A	FARMER BROS CO	Torrance	0.09	0.000	0.00	0.02	1999
94872	A	METAL CONTAINER CORP.	Mira Loma	0.08	0.000	0.39	0.36	2002
111110	A	BRISTOL FIBERLITE IND	Santa Ana	0.08	0.000	0.00	0.02	1995
156741	A	HARBOR COGENERATION CO.	Wilmington	0.05	0.000	0.02	0.00	2002
20144	OB	CANON BUSINESS MACHINES INC	Costa Mesa	0.05	0.000	0.00	0.07	1999
800320	A	AMVAC CHEMICAL CORP.	Los Angeles	0.04	0.000	0.07	0.34	2004
45938	A	E.M.E. INC/ELECTRO MACHINE & ENGINEERING	Compton	0.04	0.000	0.00	<0.01	2001
114847	A	FOAMEX L.P. (a)	Compton	0.04	0.000	0.00	0.96	1997
117785	A	BALL METAL BEVERAGE CONTAINER CORP.	Torrance	0.04	0.000	0.21	0.91	2001
22229	A	PROCESSES BY MARTIN, INC.	Lynwood	0.04	0.000	0.00	0.00	2002
800075	A	LA CITY, DWP SCATTERGOOD GENERATING STN.	Playa del Rey	0.03	0.000	0.00	0.00	2000
145368	A	SEMMATERIALS LP	Fontana	0.02	0.000	0.33	0.01	1999
115586	A	SUNDANCE SPAS	Chino	0.02	0.000	0.05	0.43	1996
51620	A	WHEELABRATOR NORWALK ENERGY COMPANY	Norwalk	0.02	0.000	0.01	0.02	1996
800009	A	AMERON PROTECTIVE COATINGS DIV	Brea	0.01	0.000	0.24	0.24	2000
55711	A	SUNLAW COGENERATION PARTNERS I	Vernon	0.01	0.000	0.01	0.00	1996
124016	A	OAKITE PRODUCTS, INC.	La Mirada	0.00	0.000	0.14	0.08	2000
55714	A	SUNLAW COGENERATION PARTNERS I	Vernon	0.00	0.000	0.01	0.00	1996
119127	A	PRC DE SOTO INTERNATIONAL	Glendale	0.00	0.000	<0.01	<0.01	2002
809	A	GARNER GLASS CO	Claremont	0.00	0.000	0.00	0.00	1996
1732	OB	INTL ELECTRONIC RESEARCH CORP	Burbank	0.00	0.000	0.00	0.00	1996
1746	A	UNITED ALLOYS INC	Los Angeles	0.00	0.000	0.00	0.00	1998

## Appendix A. Continued.

Facility ID	Facility Status	Facility Name	City	Cancer Risk in a million	Cancer Burden	Acute Hazard Index	Chronic Hazard Index	HRA Approved (year)
3084	A	CARDINAL INDUSTRIAL FINISHES INC	South El Monte	0.00	0.000	0.00	0.00	1996
3578	A	PRUDENTIAL OVERALL SUPPLY	Carson	0.00	0.000	0.00	0.00	2000
6163	A	OHLINE	Gardena	0.00	0.000	0.26	0.72	1996
6315	A	FLO-KEM, INC.	Rancho Dominguez	0.00	0.000	0.03	0.61	1999
7010	A	PRUDENTIAL OVERALL SUPPLY	Irvine	0.00	0.000	0.00	0.00	1995
8560	A	PRUDENTIAL OVERALL SUPPLY CO	Commerce	0.00	0.000	0.00	0.00	1995
8935	A	TRAIL RITE INC	Santa Ana	0.00	0.000	0.00	0.30	1996
10656	A	NEWPORT LAMINATES	Santa Ana	0.00	0.000	<0.01	<0.01	1996
19953	OB	RISTON KELLER INC	Irvine	0.00	0.000	<0.01	0.01	1996
21544	A	US GOVT, MARINE CORPS AIR STA @BLD	Tustin	0.00	0.000	0.00	0.00	2000
22092	A	WESTERN TUBE & CONDUIT CORP	Long Beach	0.00	0.000	0.02	0.62	1997
24647	A	J. B. I. INC	Compton	0.00	0.000	0.00	0.17	1999
40806	A	ASSOCIATED PLASTICS INC	Riverside	0.00	0.000	0.73	0.20	1997
51849	A	ELIMINATOR CUSTOM BOATS	Mira Loma	0.00	0.000	<0.01	<0.01	1995
70021	A	XERXES CORP ( A DELAWARE CORP)	Anaheim	0.00	0.000	<0.01	<0.01	1996
144677	A	PRATT & WHITNEY ROCKETDYNE/RUBY ACQ ENT	Canoga Park	0.00	0.000	<0.01	<0.01	1996
149241	A	VERMAX, INC.	Pomona	0.00	0.000	<0.01	0.25	1995
800018	A	BAXTER HEALTH CARE CORP, BENTLEY DIV	Irvine	0.00	0.000	<0.01	0.37	1994

Notes:

- (a) AQMD staff has requested these facilities to update their HRAs.
- (b) This includes risk attributable to the emergency DICE. The total facility risks excluding the emergency DICE are less than 10 in a million.
- (c) The specific risk driver listed in this HRA is no longer in use & the resulting risk has been eliminated or minimized.

## **Appendix B**

### **Rule Adoption and Amendments in 2009**

#### Rule 1401 – New Source Review of Air Toxic Compounds

Rule 1401 establishes cancer and non-cancer risk requirements for new, relocated, or modified sources of toxic air contaminants. Rule 1401 was amended to add cancer risk value for ethyl benzene to the list of toxic air contaminants (TACs) in the rule. Ethyl benzene was already in the Rule 1401 list for chronic health effects. The Rule 1401 TAC list is also used for Rule 1402 - Control of Toxic Air Contaminants from Existing Sources. Therefore, in addition to impacts to new sources, the staff report assesses impacts for existing facilities. *[June 2009]*